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Before the Federal Communications Commission Washington, D.C. 20554

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AUG 22 1997

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

In the Matter of

Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service

MM Docket No. 87-268

To: The Commission

SUPPLEMENT TO DISPATCH BROADCAST GROUP'S PETITION FOR PARTIAL RECONSIDERATION OF THE SIXTH REPORT & ORDER

The Dispatch Broadcast Group ("Dispatch"), on behalf of WBNS-TV, Channel 10, Columbus, Ohio, hereby files this Supplement to its Petition for Partial Reconsideration of the Federal Communications Commission's <u>Sixth Report and Order</u>, FCC 97-115, released April 21, 1997 ("Sixth Report & Order"). Dispatch is filing this Supplement as permitted in the order issued by the Chief of the Office of Engineering and Technology following the release of OET Bulletin No. 69 ("OET No. 69"). <u>Order</u>, DA 97-1377, MM Docket No. 87-268, released July 2, 1997.

WBNS-TV, which currently operates on NTSC Channel 10 in Columbus, was assigned DTV channel 11 with an ERP of 14 kW in the Sixth Report and Order. Following the release of OET No. 69,

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As demonstrated in Dispatch's initial Petition for Partial Reconsideration, the ERP assigned to WBNS-TV is not sufficient to replicate its current NTSC coverage area. In addition, as demonstrated in the initial Petition, a flaw in the Commission's so-called Planning Factors has artificially distorted the current competitive balance in Columbus by assigning disproportionately

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Dispatch commissioned an analysis of alternative channels in both the VHF and UHF bands. As demonstrated in the attached engineering statement, the assignment of DTV Channel 21 to WBNS-TV will more closely replicate WBNS-TV's actual NTSC service area and will cause a minimal impact to other DTV and NTSC assignments. See Engineering Statement of Cohen, Dippell & Everist (attached hereto).

Based on this analysis, Dispatch conditionally requests that the Commission assign DTV Channel 21 to WBNS-TV. This request is conditioned on the analysis of test results from the experimental DTV station WBNS-TV has been given authority to operate on channel 11 in Columbus. See Letter from Roy J. Stewart to WBNS-TV, Inc., dated June 16, 1997 (granting experimental application BPEXT-970225KE to permit the broadcast of DTV signals on Channel 11 in Columbus, Ohio). As discussed in the attached engineering statement, the results from this experimental station will assist Dispatch, inter alia, in evaluating the feasibility of an upper-adjacent DTV signal to a

^{1 (...}continued)
higher ERPs to low-band VHF stations in the Commission's DTV table as compared to high-band VHF stations.

collocated, lower-adjacent NTSC signal. Dispatch will update this Supplement as soon as practical following the completion of testing pursuant to its experimental authority.

Respectfully submitted,
DISPATCH BROADCAST GROUP

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Its Attorneys

Dated: August 22, 1997

ENGINEERING STATEMENT
ON BEHALF OF
DISPATCH BROADCAST GROUP
CONCERNING SUPPLEMENT
TO PETITION FOR RECONSIDERATION
MM DOCKET NO. 87-268

AUGUST 1997

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

City of Washington)
) ss
District of Columbia)

Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

That his qualifications are a matter of record in the Federal Communications Commission:

That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

> Donald G. Everist District of Columbia **Professional Engineer** Registration No. 5714

My Commission Expires:

This engineering statement has been prepared on behalf of Dispatch Broadcast

Group ("Dispatch") and supplements its Petition for Partial Reconsideration.

This supplement is based upon examination of OET Bulletin No. 69 released July 2, 1997. Dispatch is affiliated with WBNS-TV, Inc. which is the licensee of WBNS-TV, Columbus, Ohio, and operates on NTSC Channel 10.

In MM Docket 87-268, WBNS-TV has been assigned DTV Channel 11, an upper-adjacent channel to its NTSC Channel 10. Examination has been made of the data provided in a study¹ of DTV signal behavior in circuits typically found in broadcast final amplifiers. The study characterizes, among other things, out-of-band emissions from DTV signals generated by a non-linear final radio frequency (RF) amplifier. The data places in serious doubt the ability to generate and maintain an upper first-adjacent DTV channel operation which will not interfere with its lower-adjacent NTSC signal.

WBNS-TV, Inc. has received approval for an experimental operation on DTV Channel 11 from its broadcast facilities. Until the experimental operation is commissioned and the data evaluated, WBNS-TV respectfully requests that it be assigned DTV Channel 21 in lieu of DTV Channel 11. This channel has been selected after evaluation has been performed on alternate channels in both the VHF and UHF band following the methodology of OET Bulletin 69. The methodology uses the National Telecommunications and Information Administration Institute for

¹Transmitter Considerations for ATV, Harris Corp, Broadcast Division, Robert J. Plonka, November 22, 1996.

Telecommunications Sciences ("ITS") computer and the Communication System Performance Model--Point-to-Point Irregular Terrain HDTV Model ("HDTV Model"). This HDTV model uses the Longley-Rice propagation methodology and evaluates in grid cell size 0.75-1.5 km with 3-second terrain data intervals between every 90 meters to 100 meters at one degree intervals.

Attached hereto is a Table of Allocations which demonstrates that Channel 21 can be assigned, will more closely replicate the WBNS-TV NTSC Grade B signal, and will cause a minimal impact to other DTV and NTSC assignments. From these studies, the power required is from 854 kW to 1000 kW.

TABLE I PROPOSED CHANNEL 21 DTV TO NTSC ALLOCATION STUDY AUGUST 1997

Channel Call City/Sta		,	Distance		
		Call	<u>City/State</u>	Actual km	<u>Required</u> km
N	21	WBNS-DTV	Columbus, OH		
N-7	14	None within 130 km		••	80.5
N-4	17	None within 130 km			80.5
N-3	18	WHIZ-TV	Zanesville, OH	89.2	80.5
N-2	19	None within 130 km			80.5
N-1	20	WOUB-TV	Athens, OH	105.0	88.5
N	21	WPTA	Fort Wayne, IN	221.7	217.3
N	21	WFMJ-TV	Youngstown, OH	236.8	217.3
N+1	22	WKEF	Dayton, OH	109.1	88.5
N+2	23	None within 130 km			80.5
N+3	24	None within 130 km		••	80.5
N+4	25	None within 130 km		- -	80.5
N+7	28	WTTE	Columbus, OH	22.7	≤24.1
N+8	29	None within 130 km			80.5

TABLE II DTV TO NTSC FCC CHANNEL 11 ALLOCATION STUDY AUGUST 1997

			-	Dist	ance
Chan	<u>nel</u>	Call	City/State	<u>Actual</u> km	<u>Required</u> km
N	11	WBNS-DTV	Columbus, OH		
N-1	10	WBNS-DTV [NTSC]	Columbus, OH	0	≤11.3
N	11	WTOL-TV	Toledo, OH	191.3*	244.6
N	11	WVAH-TV	Charleston, WV	196.8*	244.6
N	11	WPXI	Pittsburgh, PA	263.1	244.6
N+1	12	None within 130 km			114.3

^{*}Short-spaced station.

TABLE III DTV TO DTV ALLOCATION STUDIES AUGUST 1997

				Distance	
Chan	nel	Call	City/State	<u>Actual</u> km	<u>Required</u> km
N	21	WBNS-DTV	Columbus, OH		
N-1	20	WLIO	Lima, OH	127.5	88.5
N	21	WAOM	Morehead, KY	189.4*	196.3
N + 1	22	None within 130 km			88.5

			•	Distance		
Char	<u>nnel</u>	Call	City/State	<u>Actual</u> km	<u>Required</u> km	
N	11	WBNS-TV	Columbus, OH			
N-1	10	None within 130 km			96.6	
N	11	None within 300 km			244.6	
N + 1	12	WMFD-TV	Mansfield, OH	94.7*	96.6	

^{*}Short-spaced station.